

be too costly or too difficult to cross-train the company Dragon gunners. Actually, though, the only expensive part would be supplying the missiles themselves. A Stinger missile and launcher costs about \$50,000. As for training, the division Stinger teams could train the gunners, under the direction of the air defense artillery battalion.

The weapon is fairly easy to operate, and tests have shown that it has a kill probability as high as 77 percent. Both the *mujahideen* in Afghanistan and the contra rebels in Nicaragua have used the Stinger successfully. If these people can use the Stinger effectively, I am confident that the U.S. infantryman can also be trained to use it effectively.

The company's Stinger training would certainly have to include training on identifying friendly and enemy aircraft. And since this skill is perishable, the training would need to be done on a recurring basis.

The implications of using Stinger gunners who did not have proper aircraft

identification skills are serious, and doing so could result in the downing of friendly aircraft. One way to reduce this risk would be to place engagement restrictions on the infantry Stinger gunners. For example, the gunners might be allowed to fire *only* at threatening Warsaw Pact helicopters, which are easier to identify than hostile fixed wing aircraft, and which also may be the greatest threat to light infantry. (It is not as easy to distinguish between friendly and hostile fixed wing aircraft.) Although there is an IFF interrogator device that can be attached to the Stinger and used to determine whether an aircraft is friendly, the primary means of identification is visual.

During movement, a light infantry company would not have enough vehicle support to carry the extra missiles or the launchers when the platoons were using them. Therefore, in combat, the missiles would need to be stored at the battalion combat trains under the control of the battalion S-4, the same way the M202 rocket launcher is now stored. This

would be feasible, because the Stingers do not need any special maintenance. The missiles would then be brought forward at a company's request.

In peacetime, each company would need one or two MILES Stinger launchers to use for refresher training. These could be placed under the control of the company armorer and stored in the company arms room.

The Stinger missile system is an effective weapon, and it should be used to its fullest potential. The U.S. Army should make air defense organic to the light infantry company by cross-training its Dragon gunners as Stinger gunners and making the missiles available to them.

---

**Captain Michael J. Parietti** has served as a light infantry rifle platoon leader and as a light infantry company executive officer. He recently completed the Infantry Officers Advanced Course and is assigned to the Infantry School. He is a 1984 graduate of the United States Military Academy

---

## J-Edition Field Trains

**CAPTAIN ANTHONY R. GARRETT**  
**LIEUTENANT MICHAEL P. RYAN**

The implementation of the J-Edition modified table of organization and equipment (MTOE) has significantly increased the personnel and equipment in the headquarters and headquarters company (HHC) of a mechanized infantry battalion. As a result, operating the company's field trains presents formidable leadership and tactical challenges for an HHC commander.

Unfortunately, when we were assigned to an HHC in 1986, we found there was little "how to" literature on field trains operations. FM 71-2, The

Tank and Mechanized Infantry Battalion Task Force (then in draft form but published in September 1988) provided the most useful information on the subject. Further, the recent staffing of ARTEP 7-94-MTP, Infantry Battalion HHC/CS/CSS Platoons, suggests that this shortfall in CSS operations has now been corrected. The ARTEP provides tasks, conditions, and standards for establishing and operating the field trains. This document (to be published in November 1989) should fill the void in this critical area.

In the absence of this kind of help, however, we developed some techniques that helped us meet the challenge. And these techniques can still serve as a "how to" methodology to help HHC leaders meet the standards specified in the new ARTEP.

Although the techniques presented here were developed for use in Korea, the concepts and principles behind them have universal application. If you are a new HHC commander, you should find them at least a good starting point. Even if you are an experienced HHC commander,

you may find the information useful enough to incorporate into your existing SOP.

After you have assumed command and when you begin researching methods for deploying and operating the field trains, consult the S-4, the battalion executive officer, possibly the S-3, and the support platoon leader. Each of these officers will be able to advise you on the basis of his past experience and his interaction with the field trains.

Most important, if the company XO and the first sergeant have experience with the field trains, they can be an *invaluable source of information* during the planning, organizing, and executing phases.

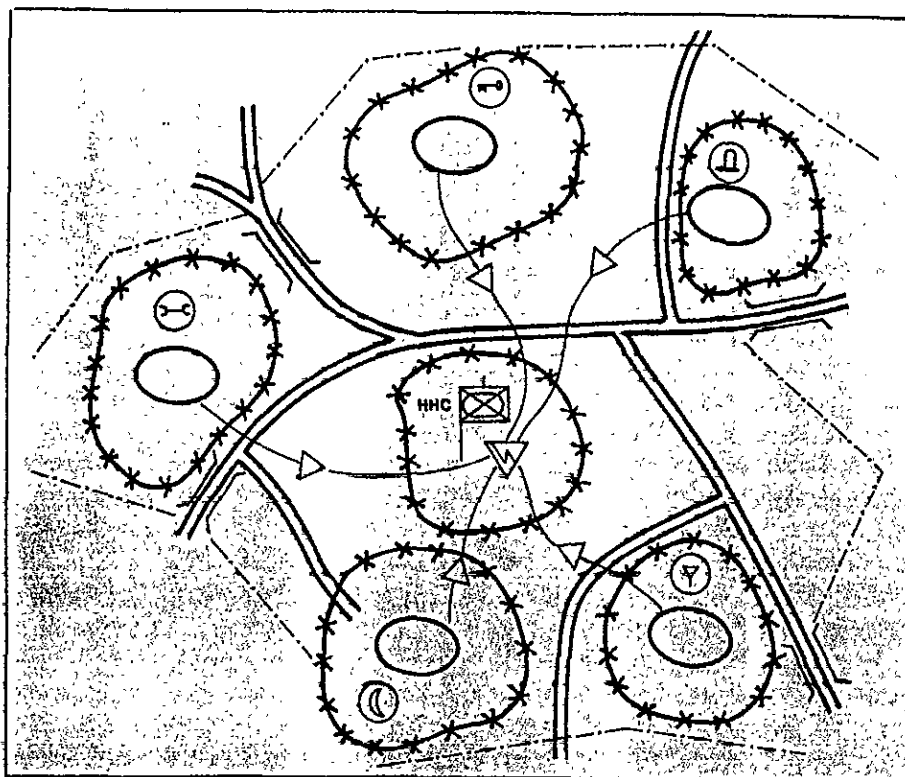
Once you have collected and digested all the available information, you are ready to begin the planning phase of your operation. While the following items are not all inclusive, they do warrant special attention:

**Route Selection.** Consider bridge classifications, choke points, road classifications (X,Y,Z), weather, access routes (entry/exit) to and from the site, and temporary maintenance collection points. Also identify alternate routes to your site and, most important, analyze the mission using METT-T and the commander's intent.

**Site Configuration.** When selecting a site, consider size, deception, detection, and dispersion. The objective of deception is to convince the opposing force that the trains are somewhere other than where they actually are. Since the opposing force detects our units primarily through electronic signatures (FM radio transmissions), using land lines for communications can reduce the chances of detection.

The cellular concept, shown in the accompanying diagram, emphasizes configuring the trains into small functional teams or cells on the basis of their specialties. A small cell or cluster will increase your ability to displace and will provide some measure of deception as well. Ideally, a cell should contain no more than 20 people and five vehicles. And always remember the basic camouflage principles.

Dispersion is essential to the survival



of the trains. If possible, locate the cells 200 to 500 meters apart using land line communications to maintain control.

**Convoy Alignment.** Although this may appear insignificant to the inexperienced, it is important because it will dictate the length of time needed to establish the trains. First, consider organizing the vehicles into serials on the basis of the size of the convoy. The primary consideration should be to arrange the serials to facilitate movement into the site. The following is a suggested alignment based on the accompanying site diagram:

- Convoy commander with XO. The XO, unless he leads the quartering party, helps direct the various serial elements into the site.

- Mess section (MKTs and water trailers). The selected location enables the mess section to set up quickly and prepare for the first LOGPAC operation.

- Communications platoon (-). The sections need to establish immediate communications with the battalion combat trains on the administration/logistics (A/L) net. This location will allow them to set up quickly. Co-locate them with the HHC command post (CP).

- HHC supply section. Since this section is responsible for helping the com-

munications platoon (-) establish the HHC CP, it should be co-located with the communications platoon.

- Line company supply sections (Companies A-E). Using the cellular technique, locate the five sections in a cluster with land line communications to the HHC CP. These elements need to arrive in the site early to prepare for the first LOGPAC operation.

- Support platoon (ammunition/cargo). Since this section contains the largest collection of people and vehicles, consider organizing it into several cells. During movement, locate the ammunition vehicles in the front of the section so that they can arrive first and get positioned before the majority of the trains arrive. For obvious reasons, locate the Class V ammunition supply point near the alternate entry/exit points.

- Maintenance sections (battalion motor officer and company contact teams). Locate these elements using the cellular concept. Since they will not be conducting a LOGPAC operation, they should move into the site later. (Remember that maintenance is forward in the company trains.) Locate the maintenance cell on firm ground near a road that can support tracked vehicles. Finally, if the task force has tanks, there should be

enough space to support an armor maintenance section.

- Support platoon (POL tankers). This section should be the last to arrive at the trains site. This technique separates Classes III and V during movement and allows for refueling on the move. Locate the Class III refueling point near a road but away from the main flow of traffic.

- Maintenance recovery vehicle and aid vehicle. Their location in the convoy should be selected based on the anticipated need to recover downed vehicles and injured personnel during movement. The first sergeant should accompany this section and advise the commander by FM radio of any problems.

Once your planning is complete, you can then attend to a few other tasks that will make the occupation of the site smoother and faster.

**Reconnaissance.** When participating in brigade level operations, the brigade S-4 will designate the brigade support area and your general location in it. After conducting a map reconnaissance of your area, follow up with an on-site leader's reconnaissance. Ideally, you should take with you a representative from each of your sections, but take at least the XO, the first sergeant, the support platoon leader or sergeant, and representatives from the communications and BMO sections.

**Situation Report.** As with any operation, you must provide the key leaders with the information they need to conduct the operation. For the deployment or displacement of the trains, a fragmentary order (FRAGO) will usually meet this requirement. Provide at least the five "W's" (who, what, when, where, and why), routes, movement schedules, signals, site location, and the occupation plan. Following your FRAGO, use the HHC XO and first sergeant to spot check.

When occupying the field trains site, the first people to arrive are members of the quartermaster party. Under the direction of the XO, they occupy hasty fighting positions, select a central entrance/dismount point for vehicles, and mark each cell location.

During daylight, you may mark the cell locations several ways (color coded engineer tape, tent stakes, and the like). During periods of limited visibility,



chemlites are an economical and effective way to mark cell locations. The method of marking is not critical, so long as everyone understands the system. Standardizing the marking system in an SOP will help prevent later confusion.

As each vehicle arrives at the dismount point, at least one soldier should dismount with his weapon and occupy a hasty fighting position that the XO has selected. A ground guide from the quartermaster party will lead the vehicle to its cell location.

As with line companies, the preparation of defensive positions for the HHC is an ongoing process. A priority of work list will enable the company to do the essential tasks in a minimum of time. The following list provides a workable technique:

**Security.** Establish observation posts (OPs) to provide early warning. Do not establish a pattern for patrols, and relocate the LP/OPs daily. At night, conduct active patrolling. Conduct "stand-to" according to the SOP. Use night vision devices.

**Crew-served Weapons.** The field trains have a significant number of crew-served weapons, and you should take advantage of this situation by positioning them to provide maximum firepower. The priority should always be overwatching entry or exit points and obstacles.

**Fighting Positions.** Little needs to be said on this topic, but the leaders may find they need to supervise non-combat arms soldiers more closely. Use camouflage extensively, and require range cards and sector sketches for each cell.

**Obstacles.** Emplace antipersonnel mines and concertina wire, and construct barricades at entry and exit points to control access into the site. Man the barricades at all times and establish communications between them and the HHC CP.

**Communications.** The cellular concept requires that each cell have reliable communications within it and with the HHC CP. Land lines are the most practical and dependable, and they also provide excellent operational security (OPSEC). Because of the electronic signature, avoid using FM radio.

**Tentage.** This task should not take priority over other mission essential tasks. If manpower is managed efficiently the soldiers will be able to erect tents for maintenance, cooking, and shelter while they are doing other tasks.

The efficient and uninterrupted operation of the field trains is essential to the support of a task force. Both Soviet doctrine and the nature of the non-linear battlefield make the field trains susceptible to interdiction. For this reason, HHC leaders must develop SOPs, conduct training, and establish habitual relationships with line company personnel to improve their chances of surviving on the battlefield.

---

**Captain Anthony R. Garrett** was a company commander in the 5th Battalion, 20th Infantry, 2d Infantry Division. Since that time, he has served with the U.S. Army Military District of Washington and is now an assignment officer at the U.S. Total Army Personnel Command. He is a 1979 graduate of the Officer Candidate School.

---

**Lieutenant Michael P. Ryan** was a platoon leader and a company executive officer in the same battalion. He is now executive officer of the HHC, 1st Special Operations Command (Airborne) at Fort Bragg. He is a 1985 ROTC graduate of Central Oklahoma State University.

---